Title (en)

A method for controlling the quality of industrial processes and system therefrom

Title (de)

Verfahren und System zur Qualitätüberwachung von industriellen Prozessen

Title (fr)

Procédé et système de contrôle de la qualité de processus indurstriels

Publication

EP 1577727 B1 20080528 (EN)

Application

EP 04425177 A 20040316

Priority

EP 04425177 A 20040316

Abstract (en)

[origin: EP1577727A1] A method for controlling the quality of an industrial processes, of the type comprising the steps of:making available one or more reference signals (x_{ref}) relating to the industrial processacquiring one or more real signals (x_{real}), indicative of the quality of said industrial process,comparing said one or more reference signal (x_{ref}) to said one or more real signals (x_{real}) to identify defects in said industrial process. Said method further comprises the operations of:obtaining (100) a real part (I_{ref}) and an imaginary part (R_{ref}) from said reference signal (x_{ref});obtaining (200) a real part (I_{real}) and an imaginary part (R_{real}) from said real signal (X_{real});computing (101, 102, 103, 104) first comparison dimensions (AC_{ref}, F_{ref}, mF_{ref}, mF_{ref_med}) between said real part (I_{ref}) and said imaginary part (R_{ref}) from said reference signal (X_{ref});computing (201, 202, 203) second comparison dimensions (AC_{real}, F_{real}, mF_{real}) between said real part (I_{real}) and said imaginary part (R_{real}) from said real signal (x_{real});comparing (204, 105, 205) said first comparison dimensions (Ac_{ref}, F_{ref}, mF_{ref}, mF_{ref_med}) and second comparison dimensions (AC_{real}, F_{real}, mF_{real}) to obtain time location information (t₁, t₂, D) associated to the presence of defects (Ga,Gf).

IPC 8 full level

G05B 19/418 (2006.01); **B23K 26/00** (2006.01); **B23K 26/03** (2006.01); **B23K 26/20** (2006.01); **B23K 26/42** (2006.01); **G05B 23/00** (2006.01); **G05B 23/02** (2006.01)

CPC (source: EP US)

B23K 26/032 (2013.01 - EP US); **B23K 31/125** (2013.01 - EP US); **G05B 19/41875** (2013.01 - EP US); **G05B 23/0221** (2013.01 - EP US); G05B 2219/32186 (2013.01 - EP US); G05B 2219/45138 (2013.01 - EP US); Y02P 90/02 (2015.11 - EP US)

Cited by

EP2746005A1; CH707367A1; US9255915B2; WO2013170253A1; US9039485B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1577727 A1 20050921; **EP 1577727 B1 20080528**; AT E397241 T1 20080615; CA 2496261 A1 20050916; CA 2496261 C 20120515; CN 100464269 C 20090225; CN 1670648 A 20050921; DE 602004014098 D1 20080710; JP 2005285113 A 20051013; JP 4949635 B2 20120613; US 2005205528 A1 20050922; US 7640125 B2 20091229

DOCDB simple family (application)

EP 04425177 A 20040316; AT 04425177 T 20040316; CA 2496261 A 20050209; CN 200510055816 A 20050316; DE 602004014098 T 20040316; JP 2005073450 A 20050315; US 8051905 A 20050316